

DESIGN TECHNOLOGY SKILLS PROGRESSION

	YEAR 1/2	YEAR 3/4	YEAR 5/6
DESIGN	Develop purposeful products based on criteria Develop ideas through talking Model and communicate ideas through drawing and making models Begin to use technology to communicate ideas	Use research to develop designs Develop innovative, functional and appealing products that are design for a particular purpose Generate, develop and communicate ideas through discussion with others Use annotated sketches, prototypes, pattern pieces and technology to generate, develop and communicate ideas.	Use research and develop criteria to inform design Develop innovative, functional and appealing products that are aimed at particular individuals or groups Generate, develop, and communicate ideas through discussion, actively seeking the views of others. Use annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and technology to generate, develop, model and communicate ideas.

MAKE	Fold, tear and cut paper and card.	Cut slots.	Cut slots.
	Mark out materials to be cut using a template.	Cut internal shapes.	Cut accurately and safely to a marked line.
	Cut along lines, straight and curved	Use lolly sticks/card to make levers and linkages.	Join and combine materials with temporary, fixed or moving joining's.
	Curl paper	Use linkages and sliders to make movements larger or more varied.	Use craft knife, cutting mat and safety ruler under supervision if appropriate.
	Use a hole punch.	Use and explore complex pop ups.	Use a glue gun with close supervision.
	Insert paper fasteners for card linkages.	Create nets to support the design process.	Use nets and models to build prototypes
	Create hinges.	Explore and evaluate different ways of joining materials	Select from a wide range of materials based on functional and aesthetic properties
	Use simple pop ups.	Explore different finishes for their product using a range of materials	Explore and use different finishes taking into account the aesthetics of their product
	Investigate temporary joining - fixed and moving		
	Join appropriately for different materials and situations e.g. glue, tape etc.		
	Explore and use a wide range of different materials according to their characteristics		
	Explore different ways of finishing their product		

EVALUATE	Explore and evaluate a range of existing products Discuss ideas and products with others Evaluate ideas and products against design criteria	Investigate and evaluate a range of existing products Evaluate their ideas and products against design criteria and seek the views of others to improve their work Understand how key events and individuals in design technology have helped to shape the world	Investigate and analyse a range of existing products based on functional and aesthetic qualities Evaluate their ideas and products against their own design criteria Actively seek and consider the views of others to improve their work Understand how key events and individuals in design technology have helped to shape the world.
TECHNICAL KNOWLEDGE	Make vehicles with construction kits which contain free running wheels. Use a range of materials to create models with wheels and axles e.g. tubes, dowel, cotton reels. Explore and use sliders and levers in their products Build simple structures Explore ways of making their structure stronger and more stable	Incorporate a circuit with a bulb or buzzer into a model. Use mechanical systems in their products (e.g. levers and linkages) Create shell or frame structures - strengthen frame s with diagonal struts. Make structures more stable by giving them a wide base. Prototype frame and shell structures.	Incorporate motor and a switch into a model. Control and monitor a product using a computer. Understand and use mechanical systems in their products (e.g. gears, pulleys and cams) Apply their understanding of how to reinforce and strengthen increasingly complex structures using a range of materials.

COOKING AND NUTRITION	Develop a food vocabulary using taste, smell, texture and feel. Group familiar food products e.g. fruit and vegetables. Cut, peel, grate and chop a range of ingredients. Work safely and hygienically. Understand the need for a variety of foods in a diet . Measure and weigh food items using non statutory measures e.g. spoons, cups.	Develop sensory vocabulary/knowledge using, smell, taste, texture and feel. Analyse the taste, texture, smell and appearance of a range of foods. Follow instructions. Make healthy eating choices from an understanding of a balanced diet Join and combine a range of ingredients. Work safely and hygienically. Measure and weigh ingredients appropriately.	Analyse food products taking into account the properties of ingredients and sensory characteristics. Select and prepare foods for a particular purpose Taste a range of ingredients, food items to develop a sensory food vocabulary for use when designing. Weigh and measure using scales Cut and shape ingredients using appropriate tools and equipment e.g. grating Join and combine food ingredients appropriately e.g. beating, rubbing in. Decorate appropriately. Work safely and hygienically. Show awareness of a healthy diet from an understanding of a balanced diet.
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HORTICULTURE	Understanding: Explore the outdoor environment. Name and identify things that we might see growing in a garden. Gain an understanding of what plants and vegetables need to grow effectively – explore what will happen if elements are missing. Planting skills: Plant seeds and bulbs in pots and planters and observe the changes over time. Write labels for plants and vegetables in order to identify them. Begin to understand that we can separate our fruit and vegetable waste from normal everyday waste. Tool Skills Select and use tools safely – with adult guidance when appropriate. Use a trowel, spade or dibber to dig and or to make planting holes. Use a hand fork to effectively remove weeds etc. Use a rake to level soil and clear leaves etc. Care skills: Use a watering can to water plants when it's necessary to do so.	Understanding: Explore the outdoor environment. Name and identify familiar plants and vegetables once grown. Know what plants need to grow, name parts of a plant. Planting skills: Plant seeds and bulbs into the soil and firm in. Sow seeds into a planter with guidance. Take care of what we are growing. Begin to understand that we can recycle our plant and veg waste. Tool Skills Select tools for a specific purpose and use them safely.	Understanding: Begin to understand that plants and vegetables need diverse climates and conditions to grow in – e.g we grow tomatoes in a greenhouse Develop an understanding of the lifecycle of a plant. Planting skills: Know that we plant things for a purpose and to try the products that we have grown. Care and protect what we are growing using various techniques e.g watering, covering To know and understand about decay e.g composting. Harvest what we have grown e.g digging root crops such as potatoes and carrots without damaging them and pick peas and beans. Tool Skills Use various tools safely and without support to dig, plant and remove weeds etc. Use secateurs to prune – with supervision where necessary.
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